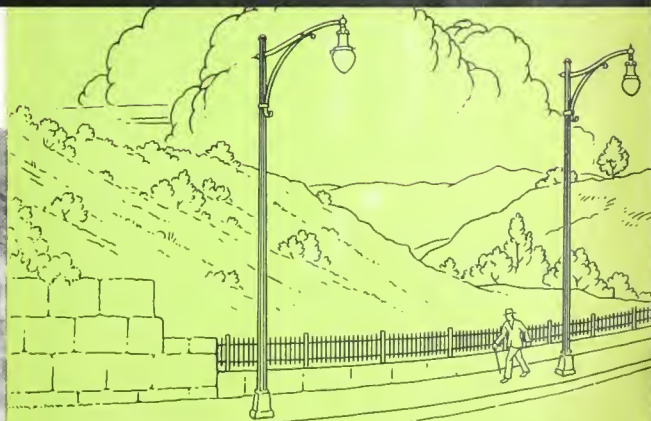


MAR 7 1938

GEA-2744



# Union Metal *Steel* LIGHTING STANDARDS



GENERAL  ELECTRIC

# DESIRABLE FEATURES METAL LIGHTING

**U**NION Metal lighting standards will meet every requirement of modern street lighting. They are attractive in appearance, and their steel construction provides strength not only to support the luminaire but to absorb traffic impacts without endangering life and property.

Union Metal standards are designed by artists and engineers who have had many years of experience in the development of street-lighting poles. These standards are available in many attractive designs to harmonize with all types of architecture. Standards are available for use with both upright and pendant luminaires, thereby meeting every requirement of the I.E.S. Street Lighting Code. These poles are made especially for use with General Electric Novax luminaires, and this equipment assures a modern street-lighting installation which will meet your needs for many years.

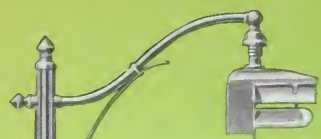
The heavy steel construction of these standards assures maximum strength and a long period of service with low maintenance expense. Union Metal poles are available in two general types: heavy-duty, and light-gauge tie-rod construction.

## Heavy-duty Standards

These strong, attractive street-lighting standards are generally used to meet the requirements of modern pendant lighting. They are available in three types of shafts—the Octaflute, the Octagonal, and the Monotube. They can be supplied in any desired mounting height, and with various lengths of bracket arms for supporting the luminaire.

The Octaflute shaft has eight flutes, the Octagonal shaft has eight flat sides, and the Monotube is a plain, tubular shaft. All types are made with a continuous taper and have only one vertical seam, which is electrically welded and rolled smooth, forming an integral tube. The special cold-rolling process used in manufacturing these standards materially increases their tensile strength. These shafts are manufactured from one thickness of No. 11 U. S. Gauge sheet steel for regular street-lighting service. They are also available in heavier gauges for extra-heavy duty, such as combination street-lighting and strain purposes or for special applications.

These standards may be of the embedded type for setting directly in the ground or in concrete, or of the



Octaflute design  
No. 6213 for pendant  
luminaires

Columbian design  
No. 807 for upright  
ornamental  
luminaires

Normandy design  
No. 8248 for upright  
ornamental  
luminaires



# FEATURES OF UNION HOISTING STANDARDS

anchor-base type to be held in place by means of anchor bolts which have been previously embedded in concrete. The anchor-base type has an ornamental steel flange welded to the bottom of the shaft and is held in place by the anchor rods which have been previously embedded in concrete. The latter method makes possible the speedy erection of the pole, since the concrete foundation and anchor rods can be installed before the standards arrive. Then it is necessary only to set the standard on the foundation and bolt it down. The anchor-base construction also facilitates aligning the standards or making replacement when a standard is damaged by collision.

When additional ornamentation is desired, or the use of a cutout or transformer is required with each pole, the standards with the anchor-base construction are supplied, having an ornamental sub-base compartment. These bases have a door large enough to facilitate installation and maintenance of such auxiliaries. The bases are made of cast iron for ordinary service, and of cast steel for combination heavy-duty lighting and strain purposes.

## Light-gauge Standards

The light-gauge Union Metal standards are generally used with the upright-type luminaires. Although the pendent type of lighting is now more popular for modern street-lighting systems, there are many applications for the upright-type luminaire. Union Metal light-gauge standards are available in many designs and mounting heights to fill all requirements for this type of application.

These standards consist of an ornamental base, a fluted shaft, and a top casting. They are usually mounted on a concrete foundation. The cast-iron base is held to the concrete foundation by anchor rods which project from it to the top of the base. The shaft is held to the base by three tie rods which run through the shaft and are fastened to the top casting. Construction details of this standard are illustrated at the right. Lead gaskets are used between the steel shaft and the top and bottom castings, to provide a tight seal.

This sectionalized construction has many advantages. The standards are easily installed without the necessity of hoisting equipment. Maintenance costs



Octaflute design  
No. 6319 for pendent  
luminaires

Octagonal design  
No. 40042 for  
pendent luminaire

Monotube design  
No. 6221 for pendent  
luminaires

# DESIRABLE FEATURES METAL LIGHTING

**U**NION Metal lighting standards will meet every requirement of modern street lighting. They are attractive in appearance, and their steel construction provides strength not only to support the luminaire but to absorb traffic impacts without endangering life and property.

Union Metal standards are designed by artists and engineers who have had many years of experience in the development of street-lighting poles. The standards are available in many attractive designs to harmonize with all types of architecture. Standards are available for use with both upright and pendant luminaires, thereby meeting every requirement of the I.E.S. Street Lighting Code. These poles are made especially for use with General Electric Nova luminaires, and this equipment assures a modern street-lighting installation which will meet your needs for many years.

The heavy steel construction of these standards assures maximum strength and a long period of service with low maintenance expense. Union Metal poles are available in two general types: heavy-duty, and light-gauge tie-rod construction.

## Heavy-duty Standards

These strong, attractive street-lighting standards are generally used to meet the requirements of modern pendant lighting. They are available in three types of shafts—the Octaflute, the Octagonal, and the Monotube. They can be supplied in any desired mounting height, and with various lengths of bracket arms for supporting the luminaire.

The Octaflute shaft has eight flutes, the Octagonal shaft has eight flat sides, and the Monotube is a plain, tubular shaft. All types are made with a continuous taper and have only one vertical seam, which is electrically welded and rolled smooth, forming an integral tube. The special cold-rolling process used in manufacturing these standards materially increases their tensile strength. These shafts are manufactured from one thickness of No. 11 U. S. Gauge sheet steel for regular street-lighting service. They are also available in heavier gauges for extra-heavy duty, such as combination street-lighting and strain purposes or for special applications.

These standards may be of the embedded type for setting directly in the ground or in concrete, or of the



Octaflute design  
No. 6243 for pendant  
luminaires

Normandy design  
No. 8246 for upright  
ornamental  
luminaires

Columbian design  
No. 807 for upright  
ornamental  
luminaires



# FEATURES OF UNION LIGHTING STANDARDS

anchor-base type to be held in place by means of anchor bolts which have been previously embedded in concrete. The anchor-base type has an ornamental steel flange welded to the bottom of the shaft and is held in place by the anchor rods which have been previously embedded in concrete. The latter method makes possible the speedy erection of the pole, since the concrete foundation and anchor rods can be installed before the standards arrive. Then it is necessary only to set the standard on the foundation and bolt it down. The anchor-base construction also facilitates aligning the standards or making replacement when a standard is damaged by collision.

When additional ornamentation is desired, or the use of a cutout or transformer is required with each pole, the standards with the anchor-base construction are supplied, having an ornamental sub-base compartment. These bases have a door large enough to facilitate installation and maintenance of such auxiliaries. The bases are made of cast iron for ordinary service, and of cast steel for combination heavy-duty lighting and strain purposes.

## Light-gauge Standards

The light-gauge Union Metal standards are generally used with the upright-type luminaires. Although the pendent type of lighting is now more popular for modern street-lighting systems, there are many applications for the upright-type luminaire. Union Metal light-gauge standards are available in many designs and mounting heights to fill all requirements for this type of application.

These standards consist of an ornamental base, a fluted shaft, and a top casting. They are usually mounted on a concrete foundation. The cast-iron base is held to the concrete foundation by anchor rods which project from it to the top of the base. The shaft is held to the base by three tie rods which run through the shaft and are fastened to the top casting. Construction details of this standard are illustrated at the right. Lead gaskets are used between the steel shaft and the top and bottom castings, to provide a tight seal.

This sectionalized construction has many advantages. The standards are easily installed without the necessity of hoisting equipment. Maintenance costs

are minimized, since in case of traffic collisions it is possible to replace or repair the damaged parts instead of buying a complete new standard.

The light-gauge shafts are usually constructed of two thicknesses of No. 22 U. S. Gauge copper-bearing steel. These are securely pressed together and have only one vertical joint, which is lock-seamed to provide additional strength and to prevent opening.

The ornamental bases for these standards are made of cast iron. The base size depends on the design of standard desired and the type of cutout or transformer to be used. Care should be exercised in selecting the type of standard to insure the proper-sized base and door opening.

## Finishes

All standards are thoroughly cleaned and painted inside and out with a high-grade priming coat of metallastic paint to prevent corrosion. A final coat should be applied after the standards have been installed.

Light-gauge standards are always supplied with the steel shafts galvanized before painting. When additional protection is required on heavy-duty standards, they may be cadmium-plated before painting, at nominal additional cost. All miscellaneous hardware, such as nuts, bolts, washers, shims, and the threaded portions of anchor rods are galvanized or cadmium-plated.

When unusual effects are desired or further weather protection is needed, the light-gauge steel shaft can be supplied with an outer jacket of cold-rolled copper. This reinforced copper shaft is supplied in natural finish, verd antique, oxidized copper, or statuary bronze. Castings can also be supplied in bronze or aluminum.

## General

Union Metal standards are manufactured in a modern factory by skilled workmen. Close attention is given to every detail to insure the best possible product at the lowest cost. Ornamental base castings are cast vertically to prevent unsightly seams and to assure fine, clean-cut, ornamental lines and uniform thickness.

The designs illustrated in this publication are only a few of the many which are available. Designs can be supplied to meet every requirement. Additional information may be obtained upon request from your lighting specialist in the nearest General Electric office.

# PRICES AND ORDERING DATA

DESIGN NO. AND PRICES						Pole Size B	Size of Pipe Arm C	Apprx Light Center † E	Mount- ing Height † D	SIZE OF BASE	
A 4'-0"	List Price	A 6'-0"	List Price	A 8'-0"	List Price					Height F	Diam G
6213Y38	\$138.30	6213Y10	\$141.90	6213Y39	\$145.80	7"x4"x21'-6"	2"	22'-1"	23'-9"	1'-6 1/2"	14 1/2" sq
6213Y40	151.10	6213Y41	154.90	6213Y17	158.50	7.5"x4.14"x24'-0"	2"	24'-7"	26'-3"	1'-6 1/2"	14 1/2" sq
6213Y42	159.00	6213Y43	162.80	6213Y44	166.50	8"x4.36"x26'-0"	2"	26'-7"	28'-3"	1'-6 1/2"	14 1/2" sq
6319Y10	130.70	6319Y11	132.90			6"x3.76"x16'-0"	1 1/2"	18'-6"	19'-4"	1'-6 1/2"	14 1/2" sq
6319Y12	133.90	6319Y13	136.10			6"x3.55"x17'-6"	1 1/2"	20'-0"	20'-10"	1'-6 1/2"	14 1/2" sq
6319Y14	136.60	*6319Y15	138.80			6"x3.34"x19'-0"	1 1/4"	21'-6"	22'-4"	1'-6 1/2"	14 1/2" sq
6319Y2	142.50	*6319Y16	144.70			6"x3"x21'-6"	1 1/4"	24'-0"	24'-10"	1'-6 1/2"	14 1/2" sq
40042	152.80					7"x4.62"x17'-0"	1 1/2"	17'-8"	18'-6"	2'-7 1/2"	20" oct
40042Y2	154.40					7"x4.48"x18'-0"	1 1/2"	18'-8"	19'-6"	2'-7 1/2"	20" oct
40042Y3	155.90					7"x4.34"x19'-0"	1 1/2"	19'-8"	20'-6"	2'-7 1/2"	20" oct
40042Y1	158.80					7"x4"x21'-6"	1 1/2"	22'-2"	23'-0"	2'-7 1/2"	20" oct
6221Y34	68.50	*6221Y35	70.30			6"x3.34"x19'-0"	1 1/4"	17'-4"	18'-2"	3 1/8"	9 1/2"
6221Y36	74.30	*6221Y37	76.00			6"x3"x21'-6"	1 1/4"	19'-10"	20'-8"	3 1/8"	9 1/2"
6221Y38	83.30	6221Y39	86.20	*6221Y40	89.00	7"x4"x21'-6"	2"	19'-10"	20'-8"	3 1/2"	10 1/2"
6221Y3	82.00	6221Y41	84.30	*6221Y42	86.60	7"x3.78"x23'-0"	1 1/2"	21'-4"	22'-2"	3 1/2"	10 1/2"
6221Y4	85.80	*6221Y43	87.70	*6221Y44	90.00	7"x3.5"x25'-0"	1 1/2"	23'-4"	24'-2"	3 1/2"	10 1/2"
6221Y5	96.30	6221Y45	98.50	*6221Y46	100.80	7.5"x3.58"x28'-0"	1 1/2"	26'-4"	27'-2"	3 3/4"	11"
		6221Y6	115.00	*6221Y47	117.20	8.5"x3.88"x33'-0"	1 1/2"	31'-4"	32'-2"	4 1/4"	12"

\* For luminaires weighing 20 lb or less.

† These dimensions for 6-ft brackets. For 4-ft brackets light center and mounting heights will be approximately 3 inches less.

Prices and other data subject to change without notice.

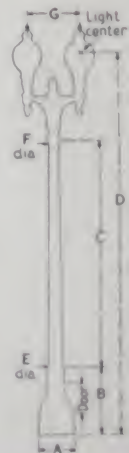
Prices subject to discount.



Design No.	Height of Std C	Apprx Light Center D	BASE		Light Center Spread	Price
			Height B	Diam A		
△807X13	15'-11"	17'-8"	3'-0"	20"		\$96.80
*8248	14'-10"	19'-4"	2'-11"	19"	3'-0"	183.70

△ For shorter standards deduct \$2.20 per full ft.

\* For shorter standards deduct \$3.30 per full ft.



## GENERAL ELECTRIC

SCHENECTADY, NEW YORK

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